UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,186	08/24/2000	Donald Fedyk	10360-062001	4310

26161   7590   01/14/2004

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EXAMINER
BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/645,186	FEDYK ET AL.
	Examiner	**Art Unit**	
	Steven Blount	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4,5*.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Drawings

A.   The drawings are objected to by the examiner, because in figure 2, the large,

rectangular background (ie, member 34) has made it so that the smaller boxes inside of

it (ie, members 21, etc) are not readable. Appropriate correction is required.

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-2, 4-5, 7-10, 13, 16-17, 20-21, 24, 26-29, 32, 35-36, 39-40, 45-48, 53,

and 56 - 57 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent

6,363,319 to Hsu.

With regard to claims 1 - 2, Hsu teaches allocating "flows" by determining if there

is sufficient bandwidth (col 3 lines 5+) available, obtaining a cost associated with using

the network link (col 3 line 17) and deciding whether to allocate the resource on the link

(path) based on the amount of bandwidth on the link and cost (see col 15 – 23).

Although "flows" are taught instead of explicitly mentioning data paths, it is obvious to

one of ordinary skill in the art that flows are associated with "data" and "data paths".

With regard to the following claims (hereinafter Cl), note the following: Cl 4 - 5:

hops and topology database: col 5 lines 55+ and col 11, lines 53+; Cl 7: alternative

routes: col 7, lines 50+, and col 5 lines 18+; Cl 8: MPLS: see col 5 lines 5+ and the

entire patent; Cl 9: see col 3, lines 5+; Cl 10: priority: col 6 lines 17+.

CI 13: see rejection of claim 1 above, and note MPLS is taught; CI 16: see

rejection of claim 7; CI 17: see rejection of claim 10; CI 20: see the rejection of claim 1,

and note the method steps are capable of being stored on computer readable medium,

and see also members 152 and 170 in figure 1D; CI 21: see rejection of claim 2; CI 24:

see rejection of claim 5; CI 26: see rejection of claim 7; CI 27: see rejection of claim 8;

CI 28: see rejection of claim 9; CI 29: see rejection of claim 10; CI 32: note use of MPLS

and see rejection of claim 13; CI 35: see rejection of claim 7; CI 36: see rejection of

claim 10; CI 39: see rejection of claim 1, and note that the apparatus limitations are all

taught in the accompanying method limitations; CI 40: see rejection of claim 2; CI 45:

see rejection of claim 7; CI 46: see rejection of claim 8; CI 47: see rejection of claim 9;

CI 48: see rejection of claim 10; CI 53: see rejections above, especially of claims 1 – 2

and also 8; CI 56: see rejection of claim 7; CI 57: see rejection of claim 10.

3.   Claims 3, 6, 14-15, 22-23, 25, 33-34, 41-44, and 54-55 are rejected under 35

U.S.C. 103(a) as being obvious over U.S. patent 6,363,319 to Hsu as applied above,

and further in view of U.S. patent 6,034,946 to Roginsky et al.

With regard to claim 3, Hsu teaches the invention as described above, but does

not teach comparing cost to a predetermined maximum acceptable cost. Roginsky et al

teaches identifying network paths that have "performance characteristics" less than

certain threshold values, as is described in col 4, lines 60+ and the abstract (the

examiner submits that this is also well known in the art of optimization). It would have

been obvious to one of ordinary skill in the art at the time of the invention to have

allocated the bandwidth of Hsu to a path whose associated cost value does not exceed

a predetermined maximum value, in light of the teachings of Roginsky et al, in order to provide a further means of determining the most efficient allocation of resources on the network. With regard to claim 6, note the discussion of sufficient bandwidth above with regard to claims 1 – 2, and also the maximum cost discussion immediately above.

Cl 14: see rejection of claim 3; Cl 15: see rejection of claim 4; Cl 22: see rejection of claim 3; Cl 23: see rejection of claim 4; Cl 25: see rejection of claim 6; Cl 33: see rejection of claim 3; Cl 34: see rejection of claim 4; Cl 41: see rejection of claim 3; Cl 42: see rejection of claim 4; Cl 54: see rejection of claim 3; Cl 55: see MPLS described above.

4.   Claims 11 – 12, 18-19, 30-31, 37-38, 49, 50-52, 58 and 59 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,363,319 to Hsu as applied above, and further in view of U.S. patent 5,687,167 to Bertin et al.

With regard to claim 11, Hsu teaches the invention as described above, but does not teach taking at least a portion of the bandwidth in the network path that is being used at a different priority level to accommodate the original, predetermined priority level. Bertin et al teaches taking bandwidth from a link with lower priority and giving it to a link of higher priority that needs it in col 3, lines 50+ to col 4, lines 1+.

It would have been obvious, to one of ordinary skill in the art at the time of the invention, to have provided bandwidth to the higher priority connections which lack it from the lower priority connections in Hsu, in light of the teachings of Bertin et al, in order to maximize the network resources.

Cl 12: it would be obvious to take the bandwidth from the "other" data path,

whether it has a higher or lower priority; Cl 18: see the rejection of claim 11; Cl 19: see

rejection of claim 12; Cl 30: see rejection of claim 18; Cl 31: see rejection of claim 12; Cl

37: see rejection of claim 18; Cl 38: see rejection of claim 12; Cl 49: see rejection of

claim 18; Cl 50: see rejection of claim 12; Cl 51: see figure 10 of Hsu; Cl 52: the circuit

in figure 1D is programmable; Cl 58: see rejection of claim 18; Cl 59: see rejection of

claim 12.

5.   Steven Blount may be reached at 703-305-0319 Monday through Friday between

the hours of 9:00 and 5:30.

Ajit Patel
Primary Examiner

SB
12/26/03